tember, Zeller). Hagen stated that he had it from the Harz, Bavarian Alps, and Styria (?). Ulmer adds Hessen. Supposing it to be the true flavipennis of Pictet, it should occur in the Val d'Illiers, Valais. This list may require revision, as some of these localities may refer to H. chapmani. I found H. flavipennis commonly at Silvaplana (July 18th to 25th, 1904); Ris has taken it in the Murgtal (July 27th, 1888), at Cierfs in the Münstertal (July 14th, 29th, 1909); and Klapálek in Carinthia (July 31st, 1899).

A NEW SPECIES OF CHIROTHRIPS (THYSANOPTERA) FROM SOUTH AMERICA.

By C. B. WILLIAMS, B.A., F.E.S.

At the beginning of this year I received a small collection of miscellaneous insects from Mr. W. O. Backhouse, taken near Buenos Ayres, in the Argentine Republic, South America. Four genera of Thysanoptera were represented—Chirothrips, Frankliniella, Physothrips, and Thrips; the Chirothrips, which is a distinct species, is described below; notes on the others are reserved for the present, in the hope of getting further material to elucidate some doubtful points.

Gen. CHIROTHRIPS.

Haliday, Ent. Mag. 1836, iii. p. 444; emend. Uzel, Monog. d. Thysanopt. 1895, p. 79; emend. Hinds, Proc. U.S. Nat. Mus. 1902, xxvi. p. 133.

Chirothrips frontalis, sp. nov.

Female (macropterous).

Measurements.—Head, length 0·15 mm., width (behind the eyes) 0·122 mm.; prothorax, length 0·22 mm., greatest width 0·26 mm.; pterothorax, length 0·32 mm., width 0·30 mm.; abdomen width 0·35 mm.; wing, length (from basal lobe) 0·80 mm., width (about halfway along) 0·045 mm.

Antennæ:—segment 3 8 34 38 34 42 12 length (μ) 14 36 16 width (μ) 36 40 24 24 21 20 5

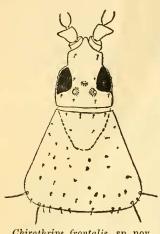
Total length, about 1.4 mm., antennæ 0.24 mm.

Colour uniform dark grey brown, fore tibiæ and all tarsi a little

paler, the third segment of the antennæ distinctly lighter.

Head (Fig. 1.) longer than wide, produced beyond the eyes into a long prominence more than half as long as the remaining portion of the head. The sides of this at first diverge slightly and then converge rapidly to a rounded point; on the converging portion the antennæ are situated. There are no long hairs on the head but several small ones which vary slightly in position and may not be quite symmetrical. In general they conform to the arrangement shown in the

figure. Eyes dark and relatively far back. Ocelli distinct, the posterior ones behind the level of the back of the eyes. Crescents red-brown, distinct (in mounted specimens). Mouth cone rounded,



Chirothrips frontalis, sp. nov. Head and prothorax.

reaching about two-fifths across the prosternum. Maxillary palps three segmented, the basal segment shortest, the apical longest; four or five sensory hairs at the tip. Labial palps two segmented, the basal segment very short and indistinct, not much more than a ridge on the labium. Antennæ about two-thirds longer than the head; the first segment short and broad, the second much longer and narrower except at the apex where it is produced outwards into a blunt prominence, the third with a distinct pedicel, the fourth and fifth equally long, the sixth the longest, the eighth longer than the seventh. Colour: first and second dark, third clear, fourth to eighth darker but not so dark as the first two. An unforked sense-cone on the third and fourth segments.

Prothorax long, as wide as the head

in front but much widened posteriorly, the whole surface of the pronotum finely striated and with a number of minute hairs scattered unsymmetrically over its surface. No long spines at the front angles, two at each hind angle and about six smaller hairs on each side along the hind margin. Pterothorax slightly wider than the prothorax in front, gradually narrowing behind. Legs normal for the genus, fore femora thickened and produced outwards at the base, tibiæ also thickened. All tarsi (except for a small dark spot at the base of the second segment) and fore tibiæ lighter than the rest of the legs. Fore wings pale brown, clearer at the base. About twenty (eighteen to twenty-one) spines on the costal vein, the distal ones finer and longer than the proximal; five or six spines at the base of the fore vein and two on its apical half; four, five, or six on the hind vein. The veins are usually very indistinct except near the base of the wings; this varies in different specimens. Hind wings clear, vein indistinguishable.

Abdomen normal, hairs on the ninth and tenth segments pale and weak. The ninth segment short, about half as long as the

tenth.

Described from eleven macropterous females taken near Buenos Ayres, Argentine, South America, in January, 1913, by W. O. Backhouse, probably from a plant (Compositæ) locally known as "cepocaballo."

Type in the Hope Department, Oxford University Museum. This species may be easily separated from all others of this genus by the great prolongation of the head beyond the eyes, and also from hamatus, Trybom, obesus, Hinds, crassus, Hinds,

and mexicana, Crawford, by having two spines at the hind angle of the prothorax, and from both manicatus, Bagnall, and similis, Bagnall (if these two are really distinct and not forms of the same variable species), by the more slender antennæ and relatively longer prothorax.

The John Innes Horticultural Institution, Merton, Surrey: January, 1914.

A NEW SPECIES OF EURYTOMA FROM QUEENS-LAND, WHICH LIVES IN THE STEMS OF EUCALYPTUS.

By A. A. GIRAULT.

The following species seems phytophagous, since I found it inhabiting short grooves or channels under the bark of young Eucalyptus trees, somewhat after the manner of Scolytidæ. Where occurring, the stems of the trees were somewhat swollen. When one thinks of it, this species does not seem to differ greatly in habit from the other members of its tribe, which seem to live on galls rather than upon gall-makers. Has the parasitic habit of the Eurytomini been proved? The genus Bruchophagus would incline one to doubt.

Genus Eurytoma, Illiger. Eurytoma picus, n. sp.

Black, the legs, tegulæ and scape rich reddish brown, the hind coxæ black, the wings hyaline; flagellum brownish yellow, knees and tips of tibiæ yellow. Propodeum with a rather broad median groove. Venation pale; postmarginal and stigmal veins subequal. Scape obclavate; pedicel a little shorter than funicle 1, which is longest of the funicles, much longer than wide, about twice the length of funicle 5, which is somewhat wider than long, funicle 4 a little longer than wide, funicle 2 subequal to the pedicel. Club with three distinct joints, the antennæ 11-jointed. Mandibles tridentate. Hind tibiæ with two spurs. Pronotum with a more or less distinct, obtuse median carina. Punctuation not quite as dense as usual, the cephalic part of scutum densely, transversely lineolated.

Male.—Not known.

Described from two females taken from short grooves under the bark of young eucalypt trees in the forest, October 16th, 1913.

Habitat.—Nelson (Cairns), Queensland.

Type.--One of the above specimens on a tag, the head and a hind leg on a slide. In the Queensland Museum, Brisbane.

Magnification 3-inch objective, 1-inch optic, Bausch and Lomb.